

Lecturers seek pay arbitration

by David Jobbins

Lecturers' leaders want the long-running dispute over introduction of part-time pay rates for part-time teaching staff to go to arbitration. Their conviction that negotiations have reached the end of the road follows rejection of the latest management offer by the national executive of the National Association of Teachers in Further and Higher Education.

The package, turned down at the weekend, included new money equivalent to about 10 per cent on the annual part-time salary bill of £40m which management said could be used to achieve greater productivity.

But this week it was the local authorities' turn to express doubts that the negotiations—stretching back to the Clegg recommendation in April—had fully broken down. Before the independent chairman of the Burnham committee, Mr John Wordie, can agree to a reference to arbitration, he must be convinced there has been a total breakdown and further negotiations are pointless.

No date has yet been fixed for

a Burnham further education committee meeting, but it was expected that one would be called fairly quickly once formal notification of the teachers' panel's view was received.

Soon after the Nathe executive decision, the other organizations represented on the teachers' panel indicated support, and Nathe's general secretary Mr Peter Dawson was due to send off formal notification of the position late this week.

The two sides, agreed in principle but deeply divided over the practical implications, have agreed arbitration on at least two occasions but there has been a genuine reluctance to resort to arbitration so soon after the independent assessment of the 1980 pay claim.

In the background during the negotiations has been the management warning that too much too soon could have dire consequences for adult education, where many part-timers are concentrated.

Mr Keith Scribbins, Nathe's assistant secretary for salaries, accused the local authorities of inconsistency in "savouring" adult education while warning it would

collapse if pro rata pay was conceded.

"You cannot expect the service to survive on the basis of exploitation of part-time staff any longer", he said.

A declaration of "intense irritation" at the five month delay in implementing the Clegg suggestion has come from Nathe's inner London region part-time subcommittee.

Welcoming the Nathe executive's demand for arbitration, the subcommittee added: "Outside arbitrators cannot fail to see the justice of our claims for parity and clear up this long standing anomaly."

Many part-timers working substantial hours—20 hours a week and more—are at Inner London Education Authority colleges. Salaries are up to 50 per cent below established rates for full-time staff and part-timers lack the job security and fringe benefits enjoyed by others who may be doing almost identical work but on a full-time basis.

The subcommittee says: "Continuation of this pool of flexible casual labour represents a threat to the continuation of large sections of higher, further and adult education in the current climate."



YOP trainees in poor shape

by Patricia Sandinelli

Some entrants on to the Youth Opportunities Programme seem to be suffering from long term malnutrition, are physically debilitated and will remain unemployed, says a draft of a survey in the West Midlands has revealed.

This bleak information emerges from a YOP survey carried out by the West Midlands Regional Curriculum Unit which was set up in 1979. The survey set out to identify and recommend means of tackling problems of curriculum planning and implementation for the further education elements of YOP.

It shows that in the West Midlands, which has the highest percentage in the national total of unemployed 16-19-year-olds, college staff are very concerned that many of the long term unemployed youngsters are in poor general physical condition.

One college describes trainees as being smaller and weaker than other students, probably as a result of long term malnutrition. Others seemed to be in need of speech therapy as their speech was so poor they appeared stilted.

Some colleges were recommending that trainees should have access to medical care in the college. But the report says that it is often difficult for college staff to introduce improvements such as health care.

The report proposes that the programme's objectives should be broadened to take account of the widening labour market and change its emphasis to preparing young people for employment. This would require more flexibility in the types of skills being taught and more stress on providing young people with a basis for continuing their education beyond the programme.

Boyson flies to US for student loans research

by Paul Flather

Dr Rhodes Boyson, under-secretary of state for higher education, left this week on a fact-finding tour of the United States to assess "grass-roots" feelings on the thorny question of student loans.

Before leaving on his two-week tour, Dr Boyson confirmed that the government was preparing a report on the feasibility of introducing a loans system in Britain.

But he added that he had not made up his mind one way or the other. "I want to see how loans systems work at the grass-roots. I shall not be looking at the philosophy, but at the nitty-gritty in the States," he said.

Dr Boyson's tour will take him to four states: Oregon, California, Texas and Illinois. He will visit Berkeley, Stanford, Utah where he will visit institutions in Salt Lake City, and Washington, DC.

He will be talking to students, college bursars, banks and foundations who award loans, and former students in the process of paying back loans.

Dr Boyson, a historian and a former headmaster, sees the trip as a way of checking the primary sources. "I want to look at the actuality. Too much theory can be counter-productive." But he did leave behind some clues to his current thoughts on loans.

It is well known Dr Boyson greatly approves of the self-help philosophy contained in a loans system.

After his tour Dr Boyson, like any good historian, intends to tinker down to some more serious secondary sources. He said he had drawn up a long reading list, and among the books and documents scattered around his study was a keenly argued 25-page document attacking loans, produced by the National Union of Students.

The NUS argue that any loans system would be costly, inefficient and irreparably damage the higher education, and confer none of the advantages claimed for them.

"The Case Against Student Loans" available from the National Union of Students, 31 Endsleigh Street, London WC1H 0DU.

TUC launches campaign for more students

The Trades Union Congress is to launch a campaign to encourage a higher participation rate in higher education, especially for mature students and women.

The initiative is part of a six-point programme covering the adult education system, including challenging previously held views on adult education and training and a greater commitment to continuing education.

It was announced in a composite resolution passed unanimously at the Congress on Wednesday, which also urged the Government to set up a National Council for Adult Education, to co-ordinate and promote the provision of non-compulsory education.

The debate took place against a climate of repeated calls for expansion of education and training for the 16 to 19 age group, the impact of unemployment among young people, and the need for a new National Council for Adult Education.

The initiative behind the decision to seek a higher participation rate came from the 32,000 member Association of University Teachers, which urged the Secretary of State, Mr Peter Dawson, to "raise the number of women applying for university education in this factor that the number of female applications has been falling for some time."

The Association also urged the Government to "take steps to encourage and assist women to pursue their education and training."

education. It was a waste of public resources and money to allow the 3,000 researchers currently unemployed to remain idle.

Earlier Mr Clive Jenkins, chairman of the TUC Education Committee, said that £100m cuts in higher education would mean that new technologies were required and that the "outlets" for this would be in the private sector.

He said that the TUC would be "very keen to see that the Government's policy on education is not a waste of public resources and money to allow the 3,000 researchers currently unemployed to remain idle."

Birmingham University's cancer research team is determined to build on its past success after hearing that an award of £1.5m has been confirmed by the Cancer Research Council.

Professor David Harnden (seated), head of the department of cancer studies, with two members of his staff, Dr Phillip Gallimore (left) and Dr Malcolm Taylor, who have played a major role in developing knowledge of genetic susceptibility

to cancer and cancer-causing viruses, will be moving in 1983 to a new building financed by the campaign.

The remaining £100,000 will be spent on new equipment. In addition the campaign is increasing its annual support for the department by around one-third, or £80,000.

The work in the new building will concentrate on three areas: epithelial cell studies, molecular virology and cancer genetics.

Government denies 'cut'

Government spokesmen this week denied that the Cabinet had ordered a further cut of more than £50m in the education budget.

A newspaper report published last week claimed that the decision had been taken against the wishes of Mr Mark Carlisle, Secretary of State for Education, as a direct result of the Government's defeat over school transport charges.

But the Department of Education and Science said expenditure plans for 1981-82 were still under consideration by ministers. Although a 2 per cent reduction in local government expenditure had been recommended in the Education White Paper, no final decision had been taken and the distribution of any cuts would be a matter for individual authorities.

The local authority associations reacted sceptically to the report since they did not expect decisions on next year's budgets for schools to be taken until next month. They ruled out the possibility of such savings being found during the current financial year.

Both associations said they had had no indication of further cuts and would have expected to be consulted on any major change of policy.

£40,000 boost for Whistler fund

The fund to keep Clive Jenkins' prize Whistler Collection intact has been boosted by a £40,000 donation from the Glasgow-based British National Corporation.

The collection will be prepared only if the university manages to raise £85,000 by the middle of September, its total to be matched by the National Heritage Memorial Fund.

The university reluctantly decided earlier this year that it must have to be sold to meet a shortfall of £320,000 in the year of its new, Hunterian art gallery. However, £144,000 was raised through public donations by the end of July.

The university had anticipated that the heritage fund would intervene to meet the shortfall, but was dismayed when the appeal was announced in August.

The university's chairman, Mr Alexander Cairncross, said the university was deeply grateful for the BNO's generous donation, and the repaying of the appeal, which was raised from the sale of the collection, was a relief.

Both associations said they had had no indication of further cuts and would have expected to be consulted on any major change of policy.

The only firm budget change announced by the DES has been the provision of an extra £350,000 to finance more research on physical teacher training courses in future years. The money was found within the DES budget after an unexpectedly large number of applications took on the entire £35m allocated and applied to negotiate some of the cuts.

More than 700 graduates aged 25 or over applied for the extra £35m, compared with 480 last year. The applicants are regarded as more necessary than ever since applications for DES courses remain more than 20 per cent below the number of places available.

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SRC calls for £10m gamble fund

by Robin McKie
Science Correspondent

Universities should take more responsibility for research and set up a £10m fund for "hopeful projects". These could then be taken up by research councils if they proved promising.

This proposal forms the basis of the Science Research Council's evidence to the Merrett committee which is investigating the dual-support system—the basic mechanism for financing research at universities.

In recent years research councils have become concerned about the amounts of their money used to provide basic equipment for departments—a task that should be the role of the University Grants Committee.

To combat this the SRC—in its evidence to the seven-man committee led by Sir Alec Merrett, chairman of the Advisory Board for the Research Councils and the Committee of Vice-

Chancellors and Principals, has called for a reallocation of UGC funds in favour of science and engineering.

This could free presently frozen posts in science departments and establish a £10m fund which would be distributed to universities who could use the money to fund unlikely and unusual research proposals. Research councils are often accused of only financing work they know will produce results and of being unwilling to take risks.

The scheme is favoured by several members of the committee although much will depend on the views of the UGC's representative, Dr Edward Parkes, its chairman, who has not yet responded to the plan.

It is considered attractive because it needs only slight tinkering with budgets whereas other alternatives would require the scrapping of the whole dual-support system.

Some action will have to be taken because

the research councils' budgets are so severely strained they cannot take on the role of equipment funding that should be carried out by the UGC. Recently the SRC science board had to reject about a third of the best research proposals it received and several Nobel Prize-winning chemists are being given less than £1,000 a year by universities to equip departments.

Civil servants at the Department of Education and Science are now attempting to collect statistics which will reveal improved information about research funding and its sources for the committee. This task is being hampered by the variety of different accounting techniques employed by universities to record the origins of their grants and funds. (This task has also caused problems for another DES inquiry, led by Professor Sir Peter Swinerton-Dyer, into postgraduate supply.)

As a result the committee, which was established early this year, is not now likely to report until the New Year.

US research helped to flourish again



from Clive Cookson
North American Editor
WASHINGTON

President Carter has promised to restore the 3 per cent real growth in Government support for basic research, which he proposed last January in the original version of his 1981 budget and then sacrificed in his April package of public spending cuts.

The administration's change of heart over the science budget was part of a general U-turn on fiscal policy, which Mr Carter announced as the presidential election campaign was getting under way. The "economic federal programme" as he called it, included a proposal to increase federal expenditure on science and technology by \$300m in the fiscal year 1981 and a further \$300m in 1982.

"With this commitment, funds for basic research will grow in real terms by 3 per cent per year," the White House said. Although university spokesmen did not see how the extra funds promised could produce 3 per cent real growth unless inflation subsidies extraordinarily fast,

they were pleased by Mr Carter's announcement.

Now that the President and Congress have abandoned the anti-inflationary "balanced budget" that seemed so precious four of five months ago, in favour of tax cuts and additional spending to pull the United States out of its current recession, the prospects for the science budget suddenly look brighter.

Although details of the extra research support for 1981 and 1982 will not be announced until January, the President's advisers have already indicated how the \$600m will be divided up. Universities were delighted to learn that a significant portion—probably \$50m in 1981 and \$70m in 1982—is to be spent on a new programme to upgrade their research facilities and instrumentation.

In recent years academic laboratories have fallen well behind equivalent industrial labs in the age and quality of their equipment, and in some fields (especially engineering and computing) the gap has widened increasingly.

Difficult for universities to attract good researchers in competition

Overseas fees policy may be softening

The first signs of a softening of the Government's line on overseas students emerged this week with a long-awaited concession for refugees and the granting of special powers for London colleges and polytechnics to control numbers from abroad.

Mr Mark Carlisle, Secretary of State for Education, has agreed to make an exception for Inner London to impose a quota on overseas admissions. Although there has always been provision for exceptions, Mr Carlisle has previously justified the introduction of full-cost fees to a "preferable" policy to Labour's quota system.

However, because colleges and polytechnics in the capital attract the greatest loads of applications from foreign students, the Inner London Education Authority has been allowed to continue the quota it has operated for the past three years. ILA is the only authority to be granted such a concession and it is to review numbers during the year to assess the need for the policy in 1981-82.

For this year, institutions will be expected to limit overseas recruitment to 25 per cent of available places, providing the number does not exceed the total for 1979-80. A spokesman for the authority said the quota was intended to safeguard places for home students in view of the special circumstances in London.

One category of students exempted from this exercise and from the full cost of fees will be those officially designated refugees. Mr Carlisle announced this week that those living in Britain would now be entitled to the same benefits as home students when taking degree or equivalent higher education courses.

Refugees had previously been subject to the same tests of ordinary residence as other students. Despite hints from ministers that special arrangements might be made and calls for action from two Select Committees, aid organisations had begun to give up hope of new regulations in time for the start of the academic year.

Mr Alan Phillips, director of the World University Service, welcomed the announcement. It is obviously unfortunate that this decision was taken in September rather than in April or May, but it is marvellous that it has happened," he said.

Local authorities and institutions will be given instructions on how to define Convention refugees, who are thought to number about 4,000 in Britain. A Vietnamese boat people being resettled in Britain will be covered by the dispensation, but it will not apply to all those given asylum here.

Committee may change policy and propose power transfer

Mr John O'Leary, radical proposals for a major transfer of power in higher education have been adopted today by the Select Committee of Education in spite of opposition by the Conservative Party.

The committee of MPs meets this week for the final time and is expected to recommend a transfer of power in higher education to a new body, the Higher Education Council, in place of the current system of government by the Conservative Party.

The committee's proposals are based on a report by the Higher Education Council, which was set up in 1979 to study the future of higher education in the UK.

The report, which was published last week, recommended a transfer of power to a new body, the Higher Education Council, which would be responsible for the overall management of higher education in the UK.

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Czech visits 'must go on'

Czech philosopher, Dr Julius Tomla, this week appealed for students and academics to continue with informal visits to Czechoslovakia.

Dr Tomla, who arrived with his family in Britain last week, said such visits provided enormous benefits for students and intellectuals trying to work and study outside the official state education system in Czechoslovakia.

He referred to the visits made by Oxford philosophy dons, three of whom were expelled for attending the series of unofficial seminars he ran in Prague, and to a visit made by a student, Mr Angus Carrigan, who was expelled for giving informal meetings and discussions, by taking ideas "for a walk" in the Socratic manner.

This would not provide expulsions. The need for contact with people from the West is really essential, students will be prepared to leave and spend English if they know people are willing to continue to talk with them," he said.

Dr Tomla revealed that three of the group who were persistently harassed and beaten up by security police for attending his seminars, were also applying for exit visas to leave Czechoslovakia. They are Tomas Liska, Lenka Dvorakova, and Luděk Bednar.

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Handwritten text: "Jep 11 30 13/80"

Redefine 'overseas' says CRE

by John O'Leary

An initiative was launched this week to persuade the Government to relax its controversial regulations defining an overseas student.

Seven agencies concerned with race relations and student affairs met under the aegis of the Commission for Racial Equality and agreed to make a joint approach to the Department of Education and Science.

The CRE has asked for a preliminary meeting with DES officials in the next few weeks, hoping to influence any new guidance that may follow new definitions of ordinary residence emanating from the courts. Three judgments have been given during the summer and at least one more case is pending.

Allowing for appeals in at least two of the cases it is certain to be several months before a minister decides whether to issue new guidance. Mr Carlisle, Secretary of State for Education, has always maintained that residence qualifica-

tions are a matter for determination by the courts and no action would be taken until case law had been established.

However, the pressure groups, which include the National Union of Students, the Joint Council for the Welfare of Immigrants and the National Council for Community Relations Council, believe that the precedents should allow the Government to shorten or even abolish the three-year qualification period.

Mr Alan Parker, deputy secretary of the United Kingdom Council for Overseas Student Affairs, said: "There will have to be some new guidance as a result of the current cases and it seems to us that once someone has been established as ordinarily resident under the existing legislation which is emerging, the qualification period is irrelevant. It is simply causing hardship to a number of recently arrived immigrants."

Community relations councils and UKCOSA are dealing with more

cases connected with residence than ever before. Many students who previously qualified as home students are mystified at having to pay fees at the overseas rate, while the practice between institutions varies on which regulations to apply for students given conditional offers early in the year.

Since the new regulations operate from February, students joining courses this year are treated differently according to the timing of offers. At least one institution has changed its method of assessment after dealing with the majority of its applications.

New guidance will not be easy to formulate since the recent judgments are not wholly consistent. Whereas Lord Justice Gormley's judgment on two cases in July turned on the intention of the student to "live, study and remain" in Britain, Sir Robert Megarry, later the same month, used as his test the more nebulous concept of a student's "centre of gravity".

A levels are limiting claims Schools Council

by Patricia Santinelli

University emphasis on three A levels for entrance is resulting in too limited an education, the Schools Council's new chief examinations officer claimed this week.

Mr Peter Dines, a former headmaster, said that the viciousness of entrance requirements to university was having a prohibitive effect on the development of individual general education.

"I am very conscious in this respect of the high fliers," he said. "Doctors are a very good example of this. Their training requires the acquisition of a science A level and few study mathematics or modern languages beyond the age of 16. This applies to most professions."

He said that the quality of graduates was as good as we thought, particularly in engineering. What was needed was longer, broader degree courses which gave young people the opportunity of a well-rounded and broadly-based education.

Mr Dines urged the Government to adopt the Schools Council proposals for an intermediate-level examination—worth approximately half of A level which would enable A level students to acquire supporting subjects at I level.

But I levels will only work if the Secretary of State gives the lead

to the universities by telling them to take them into account in their entry requirements," he said.

He pointed out that by the 1990s a combination such as A and I levels would become the European norm and we would be under increasing pressure to defend our narrower system and shorter degree courses.

Mr Dines announced a £200,000 Schools Council three-year programme to improve the examination system. Its aim is to make examinations fair, accurate and consistent as possible.

As part of the programme the council is to work with the GCE examining boards to improve A level examinations by reducing the number of syllabi, simplifying and rationalizing subject titles and defining common core within subjects.

Among the issues to be researched are the use made of examination results in the selection of young people by colleges, universities and employers and what alternative methods can be devised.

Other areas are discrimination in examinations against children of particular ethnic groups, an evaluation of different methods of conducting and marking as well as the possibility of repeating results to give an indication of a candidate's ability.

Delay on TUC centre opening

The date when the planned national centre for trade union education will open may be announced at next year's Trades Union Congress.

It had been expected that TUC education committee chairman Mr Clive Jenkins would reveal to the congress in Brighton last week more of the progress towards setting up the centre.

But although the £1 million target for loans from affiliated unions was passed in July he was unable to do more than emphasize the need for a more concrete report next year.

Before the last general election the then Labour Government agreed to contribute £1 million towards the capital costs.

Mr Jenkins told the delegates: "We did not get it because a Minister did not do it in time."

Freakishly, the incoming Con-

servative Government rebuffed the TUC General Council's request to honour the Labour commitment.

There was no indication from Mr Jenkins of how close the TUC was to choosing a suitable site. The centre will expand courses for full-time union officers, senior representatives and tutors. Other key functions will be to promote a wide range of course development work and offer facilities for residential courses.

Mr Jenkins said there were crucial areas in which education and training were "absolutely vital" to the professionalism and competence of the trade union and labour movement.

This national centre would assist key people to bring pressure to bear on the large corporate institutions which were making major decisions affecting the country.

Scientists fail to unravel Ariane crash mystery

Scientists may never find out this cause of the test failure of Europe's independent Ariane 1 launchers, which recently crashed only seconds after take off.

The crash was a serious blow for European scientists including British university researchers, who have been relying on the rocket to form the basis of future European space research programmes. Such a failure would provide the launchers for a variety of projects, including those to investigate Halley's comet, to accurately plot stellar positions and to carry out X-ray astronomy work.

The rocket, which has cost Europe more than £50m to deve-

lop, exploded and crashed on its second test launch shortly after blast-off from the Guiana space centre at Kourou in French Guiana on May 23 (his year).

The wreckage was recovered and this week Mr Raymond Orre, head of the European Space Agency's Ariane programme office, said investigating scientists had now ruled out a number of possible causes, such as a faulty solid rocket motor or a defective solid rocket motor.

Interference between launching pad and rocket motors, and abrupt starting sequences damaging engines.

Rocket motors become unstable when clustered together. "In fact, it could be a combination of any of the different factors and we will have to find the cause of the Ariane crash," Mr Orre added.

Measures would be taken to counter all three possible effects and he was confident the next test launch, in February 1981, would be successful. However, a second launch would be delayed right through to 1982 because of the crash.

Mr Orre added that the test failure would add between £3m and £4m to the cost of Ariane's development although this additional cost lay within financial margins.

Paul Flather interviews Czech dissident Dr Julius Tomin in Oxford



Dr Julius Tomin with his family in the garden of their new home.

Philosophy behind a flight to freedom

Dr Julius Tomin, the Czech philosopher who ran a series of unofficial seminars in Prague for almost three years, said this week he and his family planned to return to Czechoslovakia in five years as free citizens.

Dr Tomin is a remarkable man. Sitting in the bedroom of his new home in north Oxford he told why he was forced to apply for an exit visa from his country and the bitter humiliations he faced from the security police.

At first he was told it was impossible to leave the country, except in the "interests of the state." He was then asked to sign a document saying he would not engage in any anti-Czech activities.

Before he signed, he said, "but not before I said I was deeply convinced that there was only one way in which I myself could harm the interests of Czechoslovakia abroad and that was the moment I stopped behaving, thinking, and talking freely."

He told the Czech authorities he would carefully weigh every word he used, but of course he was not responsible for the context in which they were put. "During all the years I lived in Prague I lived as a free person as far as I was physically possible. I did not continue to do so in the West."

At times, Dr Tomin said, he felt like a squeezed sponge. "It was very demanding. I felt extremely tired. I did not know what I could tell my students." The visits from the West gave him energy to continue.

But constant harassment forced him to abandon the seminars. He said everyone he knew, his friends, his students, was endangered. So regular visits were used to arrive at his seminars, carry cigarettes, apples, a toothbrush and a jersey to keep warm in the cells.

Asked if his expulsion was a victory for the police tactics, Dr Tomin said yes and no. "It might seem a victory but it was because of the violence shown by the police particularly to the students."

His wife Zdenka, a leading spokeswoman for human rights in Czechoslovakia, said it was a victory if you stop people meeting and talking. "It is a victory if you stop people meeting and talking. It is a victory if you stop people meeting and talking. It is a victory if you stop people meeting and talking."

Dr Tomin said he would not return to Czechoslovakia until he was able to live as a free citizen. He said he would not return to Czechoslovakia until he was able to live as a free citizen. He said he would not return to Czechoslovakia until he was able to live as a free citizen.

that they become conspiratorial to that victory?"

Abandonment of the seminars to the family to consider leaving Prague. "It was hard to imagine that anything positive could come of it. It was a dead-end. The only option seemed a sort of isolation," Tomin said.

The family was also convinced that Lukas, aged 17, had for three years been denied access to his high school after "complex evaluation," a euphemism for condemning the activities for his parents Dr Lukas and Marek, aged 18 and 19, doing nothing to help them financially.

He focused his attack on the rule, which he described as "Catch 21," which prevents students from being able to claim supplementary benefits if they study more than 20 hours a week.

Young people are told they need to get better qualifications to get jobs, but instead they face an obstacle race of rules and regulations and rejections, including this "Catch 21," he said.

"For every penny the Government saves on education today it could well have to pay out at least twice as much on law and order tomorrow," he said.

He asked university and college student union leaders to prepare for a wave of agitation to persuade the Government to put more money into education and he challenged Dr Rhodes Boyson, undersecretary of state for higher education, to a debate on Conservative policies.

"HMS Education" can now be seen as a rudderless ship with Captain Carlisle tied to the helm and by the Treasury lurching in direction from crisis to crisis.

The principal and vice chancellors of Heriot-Watt University, Professor George Burnett, has died in Edinburgh aged 59. Professor Burnett, who was principal of Aberdeen University, was appointed principal in 1974.

Design doubts 'unnecessary' Passes in design at A level should carry as much status as any other A level for entry to higher education, and should be the preferred entry qualification for design-based degree courses, the Design Council said this week.

In a new report, *Design Education at Secondary Level*, the council says there is still confusion about the purpose of design-based examinations at school. Most universities want students to have a good knowledge of design, and a good knowledge of design is needed for architecture, engineering, and design.

The council's report, which was published in 1977, recommended that A level design should be regarded as a separate subject, not just a subsidiary to other subjects. It also recommended that A level design should be regarded as a separate subject, not just a subsidiary to other subjects.

Mr Mansell added that for those hitherto neglected by the system, a more flexible and dynamic concept of vocational preparation was required.

Leader: page 1

Principals call for funding changes

by John O'Leary

College principals have won their battle for a voice in deliberations on a new system of financing public sector higher education. But their first act will be to call for changes in next year's interim funding arrangements.

Consultations on the recommendations of the Department of Education and Science study group for holding down unit costs during 1981-82 will begin next week. Polytechnic directors and college principals will discuss the options with the Local Education Authorities higher education group before Dr Rhodes Boyson, Minister of State for Higher Education, begins his round of discussions.

The CLEA group is anxious to sound out the interested parties representing the local authority view on the alternative recommendations made by Mr Stephen Jones's DES group. Ministers are committed to full consultations before deciding between a straightforward freeze on unit costs or an agreed set of minimum and maximum charges to the pool.

Mr Gordon Cunningham, education officer of the Association of

County Councils, said in a speech last week he wanted to correct the misconception that the local authorities wanted to "go it alone" in setting up its new national body. On the contrary, he was local authority pressure which had led to the inclusion of institutional representatives on the funding group.

CLEA's next steps would be cautious, but firm and continuing, Mr Cunningham said. They would be the essential first moves towards the establishment of a body able to speak for advanced further education in the public sector and, later, to take those decisions which require national agreement.

However, despite their meeting with the CLEA group next Wednesday, the college principals are to put their reservations about the recommendations for funding in 1981-82 direct to Dr Boyson. They will tell him that, while they are pleased to be included in the ongoing financing discussions, they fear that a new interim system could inflict new damage to the colleges and institutes.

A spokesman for the Committee of Directors of Polytechnics welcomed the talks with CLEA.

Student attacks 'Catch 21'

The Government's education policy is like a rudderless ship which lurches from crisis to crisis, the president of the National Union of Students, Mr David Aaronovitch, said this week in his first major speech since taking office.

He accused the Government of paying lip service to the importance of education and training people aged 16 to 19 but doing nothing to help them financially.

He focused his attack on the rule, which he described as "Catch 21," which prevents students from being able to claim supplementary benefits if they study more than 20 hours a week.

Young people are told they need to get better qualifications to get jobs, but instead they face an obstacle race of rules and regulations and rejections, including this "Catch 21," he said.

"For every penny the Government saves on education today it could well have to pay out at least twice as much on law and order tomorrow," he said.

He asked university and college student union leaders to prepare for a wave of agitation to persuade the Government to put more money into education and he challenged Dr Rhodes Boyson, undersecretary of state for higher education, to a debate on Conservative policies.

"HMS Education" can now be seen as a rudderless ship with Captain Carlisle tied to the helm and by the Treasury lurching in direction from crisis to crisis.

The principal and vice chancellors of Heriot-Watt University, Professor George Burnett, has died in Edinburgh aged 59. Professor Burnett, who was principal of Aberdeen University, was appointed principal in 1974.

Design doubts 'unnecessary' Passes in design at A level should carry as much status as any other A level for entry to higher education, and should be the preferred entry qualification for design-based degree courses, the Design Council said this week.

In a new report, *Design Education at Secondary Level*, the council says there is still confusion about the purpose of design-based examinations at school. Most universities want students to have a good knowledge of design, and a good knowledge of design is needed for architecture, engineering, and design.

The council's report, which was published in 1977, recommended that A level design should be regarded as a separate subject, not just a subsidiary to other subjects. It also recommended that A level design should be regarded as a separate subject, not just a subsidiary to other subjects.

Mr Mansell added that for those hitherto neglected by the system, a more flexible and dynamic concept of vocational preparation was required.

The college's finance officer, Mr Clifford Harris, blamed the new fees on ILEA's system of fixing prices.

Scientists seek Japan swop

by Robin McKie

Science Correspondent

Britain may join a programme to share research projects and exchange scientists with Japan. The move, which follows recent Science Research Council visits including a trip by the chairman, Sir Geoffrey Allen, will involve giving United Kingdom expertise in basic scientific areas in return for Japanese technological knowledge.

The British Council may also become involved by helping to bring British scientists in Japan and set up initial liaison for co-operative work. It is envisaged that three or four informal projects will be set up before any national programme.

Britain would gain Japanese expertise in areas such as micro-electronics and biotechnology while we could provide advanced knowledge in computing, software programming and polymer science. Other involvement could include giving telescope time at some of the United Kingdom's major overseas observatory installations in return for space on board Japanese satellites.

The programme, still at a very early planning stage, is to be discussed at the STC's policy meeting later this month. The council's various boards are then expected to consider plans to encourage academics to carry out research projects in Japan.

At present many Japanese scientists visit Britain on research projects but there is little reciprocity. The United Kingdom could gain through experience of Japan's close industry-university links in scientific areas and their ability in basic research work.

By encouraging post-doctoral workers to spend a year or so in Japan, the UK would gain through experience of the commercial development of scientific work, while Japan would gain through our excellence in theoretical studies. It would also break their strong tradition of isolationist scientific cooperation with the United States.

The students' union claims that the increases, which compare with a self-inflating rate of £21.80 last year, will cause an accommodation crisis for foreign students.

Chris Crowley, union president, said that the new fees were pricing students out of the halls and "putting them on the streets." The union is claiming that 170 out of a total of 363 places in the halls are vacant due to the shortfall of overseas students.

The poly's accommodation officer Sylvia Skilwell said that the vacancies were nearer 100 than 170 at present and that these were not directly attributable to a poor take-up by foreign students, but to students who did not know they would be coming to the college yet, she said.

"Nevertheless I do not expect that many foreign students will be able to pay the new rates and I have not allocated a single place for them. I am not doing so," she said.

"Overseas students have difficulty on the accommodation market anyway because of racial discrimination and halls of residence have traditionally offered them some security, particularly during the difficult adjustment period in their first weeks in London. The new rates are comparable with mortgage repayments on a house."

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Scots FE staff press for own pay body

There may soon be a new negotiating body for Scotland's further education lecturers following a petition sent to the Scottish Secretary by the Scottish Further Education Association.

At present, further education lecturers are in the same negotiating body as schoolteachers, the Scottish Teachers' Salaries Committee, although they are on the same pay scales as lecturers in education colleges and central institutions, each of whom have separate salary negotiations.

The Houghton report of 1974, which investigated the pay of non-university teachers, recommended a separate negotiating body for all college lecturers and the SFEA has called for Scottish Secretary Mr George Younger to implement this swiftly.

In the petition the association points out that in the recent dispute over teachers' salaries in Scotland, while it was willing to envisage arbitration, it was overruled by the policies of schoolteachers' unions which did not.

"For the negotiations of further

education lecturers to be dominated by the schools sector is quite anomalous," said association general secretary Mr David Bleiman. This problem threatens to undermine the common salary structure for lecturers in the three different kinds of college.

The SFEA also wrote to all Scottish MPs, and says a number of leading Conservative MPs have agreed to raise the matter with the Scottish Secretary and MPs of the three other Scottish parties have declared themselves firmly in support of the association's campaign.

The association has received a reply from Mr Younger's private secretary, which is described as "fairly encouraging".

The association says it will continue its campaign until the Government makes a definite statement, and adds: "If the Government is now willing to come forward with legislative proposals and to consult all interested parties on the details, Scottish FE lecturers may at least be able to step out of the quagmire called the STSC, where our interests are currently bogged down."

Unions condemn CVCP move

The Association of University Teachers and the National Union of Students have again condemned a decision by vice-chancellors and principals to disband a central committee for the training of university lecturers.

The AUT and the NUS today sent a joint letter to the Committee of Vice-Chancellors and Principals calling for the decision taken in July, to be reversed at its meeting at the end of September.

The decision, indicates a complacency with regard to training which can do nothing but harm to universities in the current financial and political climate," says the letter.

A spokesman for the CVCP con-

firmed that the decision to wind up the Co-ordinating Committee for the Training of University Teachers (CCTUT) was on the agenda of the next meeting.

The AUT and NUS are particularly angry because the decision was taken in spite of the recommendations of a special review group under Sir Harry Pitt, former vice-chancellor of Reading University, to double its grant to £40,000 a year and to ensure its life for at least four more years.

The letter signed by the NUS president, Mr David Aaronovitch, and AUT president, Mrs Liz-Anne Bowden, says individual universities are unlikely to take on extra responsibility for training lecturers.



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Security clamp down on code breakers

from Clive Cookson

WASHINGTON

The top secret National Security Agency (NSA) is trying again to clamp down on open academic research in cryptography, according to worried mathematicians and computer scientists who work in this rapidly growing field.

The making and breaking of codes has been a significant subject of university research only since the mid-1970s. Before then it was almost exclusively the preserve of military and intelligence agencies and, in the United States, particularly of the NSA, which has primary responsibility for monitoring worldwide communications for the American government.

From the start, the academics were uneasily aware of the NSA's worries about the national security implications of their work. On several occasions in 1977 and 1978 they accused the agency of harassment. Once the NSA allegedly tried to sabotage an academic seminar on cryptography. In another well-publicized incident, it persuaded the United States Patent Office to impose a wide-ranging secrecy order on a University of Wisconsin computer scientist who invented a new cryptographic device.

The latest clash between national security and academic freedom came into the open last month. It is about the funding of university research into computer codes. The NSA is attempting to stop the British Science Foundation supporting projects whose results could impinge on its intelligence-gathering activities.

The NSA itself wants to fund such work on conditions that would lead to results being classified and therefore unpubliable. The agency's director, vice admiral Bobby Inman, therefore persuaded Richard Atkinson, who was director of the National Science Foundation, until two months ago, to let the NSA review all proposals for cryptographic research received by the foundation.

The first effects of this policy were felt last month by Leonard Adleman of the Massachusetts Institute of Technology and the University of Southern California. The foundation told him that it would not fund part of his work on computer coding, because the NSA wanted to support it instead.

According to a report in *Science*, Adleman himself called Dr. Atkinson the next day to propose NSA funding in place of the withheld foundation grant. Dr. Adleman refused the offer because the

agency could force him to keep the results secret. Like many universities, Massachusetts bans classified research on campus.

Then, in interviews with *Science* and the *New York Times*, the admiral acknowledged his strange man with the NSF—described by Dr. Adleman as "very frightening" collusion between agencies—and revealed that the NSA would soon ask Congress for formal authorization to support cryptography research in universities. The work would not necessarily be secret, Admiral Inman said. A review panel would assess the results and decide whether they should be classified.

Adleman said he understood the instinctive objections of Dr. Adleman and many other scientists to working for an intelligence agency, but he believed that satisfactory arrangements for NSA support of academic cryptography could be worked out. "We just need two or three people who aren't scared to death of us. I rely on an dealing with sociological problems on both sides."

Meanwhile the NSF, which is the only nonmilitary source of public funds for basic research in mathematics and computing, has yet to work out a policy for dealing with the partial take-over attempted by the NSA. That is partly because there has been a leadership vacuum in the foundation since Dr. Atkinson's departure this summer. His designated successor, John Slagter, may not be confirmed by the Senate before the November election. However NSF officials have tried to reassure university cryptographers that it will not stop supporting research into computer coding.

The rapid development of cryptography as an academic discipline is attributable to the growing use of computers to store, process and transfer information. Businesses and civilian government agencies often need to encode their computer data, in order to protect sensitive data from financial and corporate espionage. Secure codes will become particularly important with the advent of electronic banking.

University scientists in the field believe their work is essential for the preservation of privacy and the prevention of computer fraud. They have also become fascinated, on a theoretical level, with the mathematics of making and breaking codes.

But, as Admiral Inman has acknowledged publicly, the intelligence gathering operations of the NSA are hampered severely by a simple, unbreakable code became readily available.

California adopts computer link

The California State University and Colleges are to spend \$50m on a new computer network, linking its 12 campuses. The project, the largest computer installation ever undertaken by an academic institution, after it is completed in two years time, 165,000 students—more than half the total university enrolment—are expected to use it.

At the heart of the statewide network will be 21 CYBER 170 series 700 computers, one for each campus and two at the state university data centre in Los Angeles. Altogether, they will have 2,747 terminals for use by students.

The system, which is to be supplied by the Control Data Cor-

poration of Minneapolis, will be applied to all areas of campus management and administration, as well as to education and research. It will also control and control the largest computer installation ever undertaken by an academic institution. After it is completed in two years time, 165,000 students—more than half the total university enrolment—are expected to use it.

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Carter promises more money

continued from page one

and private corporations. A recent survey by the Association of American Universities, which is a leading academic body, indicates that university scientists are working with instrumentation twice as old (on average) as their counterparts in industry.

Another major area for increased expenditure is in computer research involving industry, universities and government. Two specific long-term projects of this sort are due to get under way next year. One is an ocean margin drilling project, to increase geological knowledge of the sea bed beyond

the continental shelf and its mineral and energy resources. The other is basic research to improve the efficiency and performance of cars.

More genetic technology centres will also be funded. One centre is to investigate new ways of controlling corrosion (a problem estimated to cost the United States \$50 billion a year). Another is expected to be set up to promote research in robotics in industry.

President Carter said these initiatives should help his countrymen live up to Mark Twain's definition of an American as "a person who does things because they have not been done before".

'Back to school' figures reach new peak

from our North American editor

The opening of the academic year in the United States has been marked as usual by the release of new official statistics about American education.

The annual "back to school" forecast by the National Centre for Education Statistics projects an increase of 1.1 per cent in total college and university enrolment for 1980/81. That would bring the number of students in the United States to another all-time high of 11.7 million.

This century's peak enrolment is likely to be reached either this year

or next, the centre says. After 1981 small annual decreases in student numbers are forecast for the rest of the decade.

The number of American high school pupils is now falling quite fast; a 2.8 per cent decrease to 14.9 million is expected this autumn. At the elementary school level the steady enrolment decline, dating back to 1969, is beginning to bottom out, and the centre expects numbers to rise again from the mid-1980s.

That projection, with its promise that the supply of traditional college students will begin to rise again in the late 1990s, is supported by the latest birth rate figures. The

Census Bureau now expects 1981 small annual decreases in student numbers are forecast for the rest of the decade.

Another new report from the Census Bureau, on the 1979 student population, shows that while a press conference given by the Revolutionary Co-ordination of the Masses was in progress on the campus, estimates of the number of students killed in the ensuing fighting varied between 40 and more than 200.

Since then, the campus has been closed, the 20,000 students sent home and 2,000 staff left without pay. The Government has said it may reopen the university in January.

It claims that the closure was necessary because the university

Doctors tap artificial intelligence

from Charlotte Beyers

PALO ALTO

In an intensive care unit at a San Francisco hospital, John Smith breathes laboriously. He is recovering from open heart surgery. A half-dozen leads monitor his blood pressure, expired carbon dioxide, pulse rate, urinary output and other critical measurements.

At an ivory tower university, a chemist wonders what chemical structures he needs to make a hormone. An engineer wants to know if he should continue drilling an oil well.

Stanford computer scientists working in the domain of Artificial Intelligence have already created systems that can help these people.

Dr Edward Feigenbaum, chairman of the computer science department, prefers to think of Artificial Intelligence as a project involving many different fields: mathematics, psychology, linguistics, philosophy and corporate information.

"We tap the top minds in each area and form what is in effect a pool of the most advanced thinking in each field. We are miners extracting the gemstones of knowledge which are the private preserve of expert practitioners," he says.

With a group of university collaborators around the United States, Stanford professors have devised a series of computer programs to help users make more informed decisions in the fields of chemistry, engineering and medicine.

The programs are available at SUMEX-AIM, a computer centre in the Stanford Medical School to specially selected collaborators.

"Commercial use is on the horizon for many of our systems," Dr Feigenbaum adds.

DENDRAL is already in wide use. Like the other SUMEX programs, it can be used as a consultant or problem-solving assistant. Designed to help organic chemists determine the molecular structure of unknown compounds, it identifies chemicals by analytical procedures including mass spectrometry.

MOLGEN provides intelligent advice to a molecular geneticist on the planning of experiments involving the manipulation of DNA. Geneticists have various techniques such as cuts, joins and insertions for changing DNA material. MOLGEN helps them make the right choices they need to make.

The VM or Ventilator Management system monitors patients who are unable to breathe on their own, but need a respirator. At a glance it will provide the physician with a summary of the patient's condition. It can also recommend changes in therapy.

Another program, MYCIN, helps diagnose patients with severe infections such as meningitis and explain which of three kinds of antibiotics a patient has and can recommend treatment. This model is not yet available.

INTERNIST, developed at the University of Pittsburgh, may eventually be used to help health workers in rural areas make diagnoses based on clinical evidence.

PARRY, developed by Dr Kenneth Colby at the University of California, simulates the way a paranoid person thinks. If asked who he is hospitalized, the machine



The Cart is designed to explore outer space.

responds, "People get on my nerves."

There are over a dozen SUMEX programs all running by the National Institutes of Health. Within approximately five years, most will be available to industry.

In the field of robotics, Artificial Intelligence is already benefiting industry. Unlike the famous film robots, and R2-D2, the Cart has actually been designed to explore outer space.

Created by Stanford student Hans Moravec, the Cart navigates by taking nine snapshots each metre. With a lurching gait the two foot square box rolls about detecting obstacles in its path. It is equipped with a television camera and a transmitter and can be remotely controlled by radio. Mr Moravec thinks that its most important feature is the ability to function autonomously. Long before man is able to explore the hostile surface of Mars.

Another Stanford student, Victor Sheinman, invented the PUMA arm. Now manufactured by Unimation, it is widely used in the automotive industry.

Robots can be found spot welding, forging parts or loading and unloading. They are really numerically controlled tools that pick and place. Explains David Mittman, program manager in Industrial Engineering at Stanford Research International, "Stanford

thinks that there are perhaps 3,000 in use within the United States and cost an average of \$25,000 each. Sometimes they have tools such as grinding wheels or paintbrushes. In the future, they will be used for

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assembly. "People get on my nerves."

Staff strike over occupation

by John O'Leary

Teachers in schools and colleges throughout El Salvador began a national strike this week in protest at the closure and occupation by the army of the country's only public university.

The National University was taken over by the army on June 25 while a press conference given by the Revolutionary Co-ordination of the Masses was in progress on the campus. Estimates of the number of students killed in the ensuing fighting varied between 40 and more than 200.

Since then, the campus has been closed, the 20,000 students sent home and 2,000 staff left without pay. The Government has said it may reopen the university in January.

It claims that the closure was necessary because the university

was a centre of revolutionary activity and was being used to store weapons. Staff and students have denied this and called on the United Nations' Commission on Human Rights and the International Red Cross to investigate.

Now the main teachers' union, which has had 69 members murdered this year, has begun an indefinite strike. It is demanding an end to repression against the teaching profession, an indemnity for the families of those assassinated, the release of teachers who have disappeared and opposition to foreign interference in El Salvador.

Last week a professor from the National University lobbied British teaching unions at the Trades Union Congress, seeking support for the strike and financial aid for the families of the dead. 195 children have been left orphaned as a result of this year's assassinations.

The professor told *The THES*:

Homeless students forced to sleep in tent for 400

from Annelise Hopson

COPENHAGEN

When the universities and institutes for higher education started this month, 5,250 students throughout Denmark were without a college room. In Copenhagen the situation is in particular catastrophic as 3,200 students are without lodging, including students who have applied for a room within the private sector.

In Copenhagen there are five to six applicants a room, about 30 per cent more than last year, in spite of the fact that admission to the various faculties has been restricted.

In protest against the housing situation, the students last week put up a large tent on the grounds of the annex of the University of Copenhagen at Amager, an island south east of the capital. This will house about 400 of those students who do not bring their own tent.

The chairman of the Danish Students' Joint Council, Kim Carstensen, expects a rash on the tent camp this week when the universities have started.

The Minister of Housing, Mr Erling Olsen, has suggested that the students continue to live at

home but in the case of Copenhagen it seems difficult since some 70 per cent of the students come from other parts of the country.

The minister also suggested that the students try to get accommodation in the western part of Sweden in Landskrona across the Baltic Strait where housing problems are also considerable in Copenhagen. This suggestion resulted in strong protests from the various students' committees.

Another matter is that the ferry now sailing the short distance between Copenhagen and Landskrona stops operating on October 1.

When asking about the meeting between the students' organisations and the minister of housing earlier this summer, Charlotte Hildebrandt, the National Committee of Co-operation of the Educational Youth, says: "We told the minister that the situation was quite reprehensible and all he said was that he could do nothing. The previous coalition government promised that 750-800 living quarters for the young would be constructed each year, but this has not been built in all these years and that promise was made in 1978."

Decree fails to help part-timers

Academic staff are obliged to resign their faculties for 250 hours a year in order to qualify as part-time teachers, according to a government decree published last month.

And for just an additional 100 working hours a year academic staff can be classified full-time, a category that carries an automatic wage increase of about 20 per cent.

The long-awaited decree aimed at removing staff absenteeism on the campus specified that each professor can opt for either part or full-time teaching.

The decree fell well short of expectations. Its original draft in 1976 intended to force all academic staff into the full-time category and prevent politicians, bureaucrats and professionals from teaching on the campus as "a side-line". The legislation has shown again that the very people who give up their privileges as a Rome university professor told *The THES*.

Worse, the new law on attendance will not be enforced until the 1981-82 academic year.

The decree published deals mainly with the new classification of academic staff.

At the head of the academic pyramid will be the "ordinary professors". Below them is the new category of associated professors, a combination of assistant professors, established lecturers and academics who by the end of this academic year have taught for three years at a university.

Below them to qualify as associated professors, staff have to send their applications, accompanied by proofs of their didactic and scientific research work, to a board of examiners.

The decree specifies the creation of 6,000 new posts as associated professors. Of these 1,200 posts will be awarded next year during a public examination presided by the National University Council.

The third teaching category is reserved for "researchers". Into this category fall "scholarship holders", "contract teachers", and research assistants who have been working on the campus so far on a year-by-year basis.

Staff classified as "researcher" will be awarded the highest salary, but the decree thus eliminating their dependence on the annual whims of their faculty heads, the so-called *baroni*.

Colleges join the long queue for autonomy

The University Grants Commission receiving a steadily growing number of applications from colleges affiliated to universities for autonomous status. So far, 13 university colleges have been conferred on only 13 out of 4,000 odd colleges, and 100 out of 1,000 odd colleges in India.

The UGC believes that the autonomy of colleges is a prerequisite for the development of higher education in India. The UGC has been pushing for the autonomy of colleges for some time. It has been conducting a survey of colleges and universities, and must

A number of colleges, loosely referred to as "elite institutions" because they are older and draw their students from the higher social classes, have long been chafing at what they consider to be the straitjacket of affiliation to universities which are, for the most part, examining bodies.

They must adhere closely to university-prescribed curriculum, and are not free to develop their own courses. They must also accept university-devised examinations, and must

"We fear that more teachers will die during the strike at the hands of the government and the paramilitary police." The university was unique in providing somewhere for people to talk openly. El Salvador has many problems and the closure of the university is just one example.

Some 19,000 of the country's 24,000 school teachers are in the union which has called the strike and its leaders are hoping to attract support from many of those outside the union as well. The strike is certain to bring hardship. Although the university staff have been without pay for two months, their relatively high salaries allowed them sufficient savings to cope. School teachers receive only one-sixth of the university salaries.

The El Salvador Solidarity Campaign has based itself in London and is appealing for help from the teachers' union. Its address is 29 Islington Park Street, London N1.

Israelis on fund-raising tour of US

from Benny Morris

JERUSALEM

Hebrew University president Avraham Harman last week left Israel on a two-month fund-raising tour of Europe and the United States to help extricate the prestigious Jerusalem University from its economic straits.

A university spokesman noted that a trip of this length for the ailing, 66-year-old Harman was "highly unusual" and indicated the severity of the crisis.

Indeed, the Hebrew University authorities are keeping their fingers crossed about the actual opening of October 26. University rector Professor Raphael Mechoulam told me that the country's six universities and the post-graduate Weizmann Institute are science together owe their lecturers about \$10m in retroactive salary increase award.

A third of this sum is owed to Hebrew University lecturers, and Mechoulam said he "had no idea where this money would come from. So far, the government has shown no inclination to provide it."

Mechoulam fears that if the lecturers do not get their arrears during September, they will either declare a work dispute, leading to a nationwide universities strike, or to labour court action, in which a judge will order us to pay up. As we will be unable to comply we will be in the ludicrous position of having to declare bankruptcy and shut our doors."

All Israel's universities receive 70 per cent or more of their budgets from the government. Recent across-the-board budget cuts have forced the universities to disburse six per cent of their staff, including some junior, untoured academics.

Mechoulam warns that if this trend continues, affiliation will be in and the lack of "new blood" today will in the years to come inevitably lower the level of research and scholarship.

Mechoulam pointed out that over the past decade the universities' budgets in real terms have taken a 30 per cent cut, "which has eliminated all the fat, and here and there some of the flesh. Further cuts will mortally wound the Israeli academic infrastructure."

He said that the National Library, which doubles as the Hebrew University's central library, has taken a 70 per cent budget cut in real terms over the past seven years.

Top six universities must cut spending by £10m

from Lionel Cohen

NIJMEGEN

Faced with the need to bridge a record budgetary deficit and with the government's own planning bureau forecasting stagnant economic growth, the Dutch government's 1981 budget proposes massive spending cuts in education and social welfare. Higher education will be especially hard-hit; six of the biggest-spending universities must together make economies of no less than £10m before the end of next year.

Last month an emergency meeting of the Federation of University Staff Unions (COPWO) met to consider a pre-budget letter from the Minister for Education, Dr Aris Pais, warning them that most of these savings would have to be found from the personnel sector of the universities' budgets. Both new and existing staffs would be affected by the cuts, but the Minister's reduction of or considerable reduction necessary in order to achieve the required objectives.

This followed the apparent failure of Dr Pais to persuade his Cabinet colleagues to adopt an alternative economy plan under which all workers—not only those in education but also about 150,000 in other sectors—would accept cuts in holiday pay in order to avoid the necessity of achieving savings by putting university staffs out of work.

In his letter, Dr Pais emphasized that he wished to talk to the unions, not only about the total economy package, but also about ways in which staffing cuts might be carried out "as painlessly as possible". According to the Minister, there was room for a wide variety of parallel financial savings in the personnel sector which might be examined jointly with the unions with a view to reducing the impact of the cuts on actual manning levels. In particular, he suggested the lowering of starting salaries for new university staff-members, restricting the award of extra salary increments, and special payments—such as for above-average qualifications—a removal of the traditional long-service and other bonuses and a drastic reduction in the reimbursement of services travel, expenditure and the long-established parking subsidies for senior academics.

Hardest hit by the already-imposed recruitment freeze in the universities are the many well qualified job applicants and senior students who would otherwise now be starting work in new posts or established universities. The filling of which has already been programmed by the relevant faculties, and approved by their administrative boards; in one faculty alone in the University of Amsterdam, no less, than 1,000 new students are expected to start in September. The Minister has agreed to have talks with the Minister as soon as possible, but have

meanwhile refused to discuss with his senior staff any questions relating to the global level of economies which the Minister seeks to achieve.

Estimates of the effect of the cuts in terms of the number of jobs lost range between 1,000 and 1,500 over the next half year; but the calculation is further complicated by the Government's existing longer-term proposals to partially transfer the funding of research staff places away from the universities and under the control of the central scientific project-research foundation (ZWO) which is roughly the equivalent of the British UGC. In this sector, ZWO is expected to finance university places for about 150 years—say, 10 per cent of the jobs "lost" from the university budgets.

In addition, as the Minister himself was quick to point out, some two and a half per cent of all university teaching, administrative and technical staffs are in any event lost "naturally" each year. There are therefore reasonable long-term prospects of a "solution" to the present difficulty as far as existing staffs are concerned, even if it means that hardly any new work will become available for new graduates.

But the brunt of the squeeze must be borne over the next 15 months and a spokesman for the University of Utrecht—which alone faces cuts of nearly £3m next year—suddenly criticized the Minister's change of policy under which no less than 15 per cent of the required savings on personnel expenditure must be achieved by December 1981—in his view an unnecessary extra pressure on the already difficult employment situation.

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Seen against the wider background of the Dutch government's long-running proposals to modernize the entire structure of university education—and particularly in relation to plans for the introduction of a two-phase undergraduate study programme from 1985—the latest economy measures are being widely interpreted as a serious set-back for the policies of the Education Minister and his (Liberal) wing of the Liberal-Christian Democratic alliance now in office.

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BOOKS

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Dr Cave is lecturer in English at Bedford College, London.

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BOOKS

Chessboard history

Government and Community: England 1450-1509
by J. R. Lander
Edward Arnold, £12.95 and £5.95
ISBN 0 7131 6151 5 and 6152 3

Professor Lander's *Conflict and Stability in Fifteenth Century England* is a deservedly successful brief introduction to its subject. It has been invaluable in weaning students away from an image of the fifteenth century as nothing but disorder and civil war. Lander's journal articles are an indispensable part of that reinterpretation of late fifteenth-century politics which has taken place over the past twenty years; their republication in hardback as *Crown and Nobility, 1450-1509* is a boon to his many students working in the period. His latest book in "The New History of England" series, provides an interpretation of the period, at much greater length than in *Conflict and Stability*, but for a less specialist audience than *Crown and Nobility*.

The first half of the book contains chapters on the economy, the structure of government, royal finance, religious life, and "education and the arts". The chapter on religion is an excellent analysis, both of the working of the church and the quality of religious life; Lander eschews the catastrophic interpretation, seeing neither heroic virtues nor appalling vices in the English church, and ascribing the origins of the Reformation to rising expectations, both clerical and lay, confronting a state of comfortable mediocrity and the excesses of popular piety. The discussion of royal finance will be valuable; especially for its scepticism about the effect of the most trumpeted reforms, the more efficient administration of the crown lands, and "fiscal feudalism". It is also useful to have proper consideration given to the customs revenue. The chapter on the economy, however, is brief and unbalanced. Although Lander observes that 90 per cent of the people "lived more or less directly from the land", he ignores them in favour of landlords and merchants. There is no attempt to analyse the complicated social structure of the village, nor to explore the differing circumstances of the yeoman with a substantial holding and the smallholder, or landless labourer.

The second part of the book is devoted to a detailed discussion of politics. A chapter on the 1450s leads to an extended treatment of Edward IV, focusing naturally on relations with the nobility, and on foreign policy; a balanced picture, with Edward doing reasonably well in a near-impossible situation. The emphasis is on Edward's reliance at first on a few trusted followers, like Herbert and Hastings, whose power he built up in the localities; later, on members of the royal family, sometimes with little regard to probable long-term consequences, and often at the expense

of law and justice. The treatment of Richard III will not please the Fellowship of the White Boar; Richard was probably responsible for killing his nephews, and was widely unpopular in the south. Even in the north, Lander suggests, for all the partiality Richard showed northerners during his reign, he may have been less universally popular, and less competent, than is sometimes suggested. Henry VII—who gets only thirty pages, against Edward IV's hundred pages—is discussed largely in terms of foreign policy and relations with the nobility. Insecurity is the keynote of the domestic policy, developing into effective but personalised coercion.

The division of the book hinders readability. The survey of finance is oddly disembodied until the reader grasps the politics; while the political narrative presses rather relentlessly on in a way unlikely to encourage the newcomer. This is perhaps inescapable. The politics of the period do largely revolve around the relations of king and nobles; and the reader must understand about land law, inheritance, and marriage to make sense of events. Professor Lander is to be congratulated for very clear exposition of the intricacies of a general significance of events such as Edward IV's barefaced appropriation of the Mowbray inheritance on behalf of his younger son. Like, say, eighteenth-century politics, this sort of personalised chessboard history is an acquired taste, requiring considerable knowledge before it begins to fall into place.

More fundamentally, there seems to be a divergence of view between Professor Lander and the general editors of the series, A. G. Dickens and Norman Gash. Why, after all, does the first volume of a "History of England" begin in 1450? What has happened to all that went before? (Including, in the words of one of the general editors, "this wonderful fourteenth century.") Presumably the intention was to concentrate on "modern" England; but then would naturally fall to the author of the first volume to discuss the transition from "medieval" to "modern". Professor Lander is much too sensible, much too sensitive, to have any truck with that meaningless policy so unfavourable to the institutional subject of history faculties; he very nearly succeeds in avoiding the word "medieval" at all. All that is to his credit. But it does leave his book oddly unsupported at the beginning. There is little attempt to set the background, references to earlier events assume prior knowledge. Perhaps the publisher will think again and expand what is proving to be a notable and distinctive series into a real "History of England".

C. S. L. Davies

C. S. L. Davies is a fellow of Wadham College, Oxford.

A career which encapsulates the progressive tradition

Portrait of a Progressive: the political career of Christopher Addison
by Kenneth R. Thompson
Oxford University Press, £15.00
ISBN 0 19 224494 X

The career of Christopher Addison throws light on a period of British history. It exemplifies the powerful thread of historical continuity that links Edwardian liberalism with the modern Labour Party, and it helps to explain why, after several decades of ideological dominance, democratic socialism in Britain has fallen into a deep slumber.

Dr Christopher Addison was elected to Parliament as Liberal member for Hoxton in January 1910. He rapidly became identified with the progressive wing of the Liberal Party.

George's parliamentary secretary at the Ministry of Munitions, where he acted as "a leading practitioner of the progressive tradition". In 1916 he helped to engineer the Cabinet "coup" that made Lloyd George Prime Minister, and in 1917 he was made Minister of Reconstruction, charged with filling the void left by the death of Lloyd George's ambitious vision of the post-war world.

War-time collectivism made profound impact on Addison's approach to politics, and as Minister of Health he was the main Conservative proponent of increased state control over housing, education, culture and the social services. His efforts to build the homes for heroes, prompted by Lloyd George, brought him into head-on conflict with the Treasury. The Tory press, however, brought about a great leap forward for Addison. In 1945 he became an elder statesman of the Labour cabinet, and played a leading role in setting up

signed in protest against further housing cuts in 1921.

He was elected as an Independent Labour Party member for Hoxton in the general election of 1922. The treachery of Lloyd George and of his erstwhile supporters reinforced his shift to the left, and a year later he became the only ex-Conservative to join the Labour Party. His career encapsulates the progressive tradition in British politics from the 1910s to the 1940s.

The life of Addison, a man of letters, a man of action, a man of ideas, is a study in the workings of that tradition, with its distinctive blend of secular, scientific, humanitarian, and pragmatic values. It is a study in the life of a man who was a progressive in the truest sense of the word.

the British Commonwealth, and in steering Labour's welfare state and nationalisation programmes through the House of Commons.

Addison died in December 1951, two months after Labour had fallen from power, in what was probably the most crucial election of British post-war history. As the Morgans point out, his career encapsulates the progressive tradition in British politics from the 1910s to the 1940s.

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Synthesis



Ivory group from Orthis sanctuary. An illustration from The Ancient Spartans by J. T. Hooker (Dent, £12.00).

Piecemeal enclosure

The Open Field System and Beyond: a property rights analysis of an economic institution
by Carl Dahlman
Cambridge University Press, £11.50
ISBN 0 521 22881 6

Debates have been reopened recently on the origins of the open fields, the scattering of holdings within them, and their transformation into the modern village. This book is a contribution to the debate. Carl Dahlman asks why the commons or wastes were communally owned, why the arable fields consisted of scattered strips in large fields and why the villagers exercised a formal collective decision-making procedure. His answers are that communal ownership and the formation of large open fields were essential for maintaining the intimate relationship between livestock and grain and for the large-scale grazing of animals, that strips were related to the vagaries of the plough and topography, and that the persistence of scattered strips was partly risk aversion and partly an incentive to farmers to participate in a collective decision-making organisation.

These broad conclusions are unfortunately marred by oversimplification and overstatement. Dahlman wishes to explain the typical open field village, which he terms an "economic institution". He does not seem to appreciate that open field villages were about 1750, and already being subjected to varying degrees of piecemeal enclosure. Indeed by this date some villages contained mere vestiges of the former expansive open fields. One is not always dealing, therefore, with an economic institution which was regarded by one enclosure as one inspired enclosure, or one enclosure as one inspired enclosure. Indeed it could be argued that there were as many such "economic institutions" as there were open field villages, though this is as unhelpful as Dahlman's single model approach. What we need, therefore, is a comparison in the form of a model, that can register change through time and across space, and this is an important omission from this book.

Michael Turner

Michael Turner is lecturer in the department of economic and social history at the University of Hull.

An Historical Geography of England 1500-1840
by N. J. G. Pounds
Cambridge University Press, £12.00
ISBN 0 521 23739 2

Professor Pounds writes "a history of the English landscape" in his examination of human-made features which influenced the course of history and have been influenced by it. His primary purpose is "to introduce history to the spatial dimension, which has all too often been missing from historical writing". He provides an ordered view of the early sixteenth century, survives to introduce five chapters which deal, in turn, with the process of enclosure, urbanization, agriculture, manufacturing and mining, and transport in the intervening centuries. A cross-section of a start of the railway age marks the volume.

Professor Pounds tackles a huge quantity of sources with customary vigour in a volume which is eminently readable and synthetic. He combines a subtle understanding of regional and local variations with an unflinching breadth of vision that spans the entire continent. The result looks remarkably like a volume of economic history which has explicit attention to spatial dimensions. Seventy-five maps and distinctive component of the book and deserve specific comment. Europe-wide distributions of population, cereal surplus and urbanization and industrial location in times past prove particularly stimulating; and cartography in the United States of America is a study in the history of land use.

A sample of their persistent search for raw data is the estimate that the United States of America is a study in the history of land use. The danger in the persistently true, dominant tone of the Dumont and Cohen approach lies in the possibility of its provoking a counter reaction. When the motives for every action, apart from the relief of poverty, are depicted as being based on economic or strategic self-interest it is difficult to feel enthusiasm for any aid programme.

This is an unfortunate reaction to a book written by concerned authors, and this section does seem to be on firmer ground. In particular their analysis of the comparative failure of the Green Revolution is well done. They see it as the result of misplaced adherence to ultra-scientific agronomy, in spite of the fact that the social and institutional capabilities of developing nations. The inspiration of Schumacher is clearly in evidence in this argument and it is regrettable that what could have been a coherent thesis has been obscured by undue bias and by amateurishness in economic analysis.

John Tarrant, of the University of East Anglia, has produced a more substantial volume than the other two—the first of a new Wiley series which is also to be devoted to environmental and resource issues. His basic standpoint, in a rather more measured treatment, is interesting in that it reflects an important switch in emphasis from producer-orientated agricultural economics towards a greater concern for the welfare of the consumer. The dichotomy, obviously, is less marked the lower the level of development but immediately a more critical attitude is given a degree of urbanization, the presence of a class of rural landless labour. Some parts of the book are particularly useful. These include basically sensible sections covering recent food crises, production methods, and the impact of unemployment and availability, and, in a rather more scattered form, comments on the green revolution and the energy problem.

The book also has a good bibliography (though publication timing has necessarily resulted in omission of any mention of the Brandt report) and Tarrant has good eye for the telling reference. An example is the prominence given to Josling's view that an important cause of world problems is the existence of a net transfer from developed country producers to developing country consumers to the producers of the developed countries and the consumers of the developing countries resulting from the operation of governmental policies. The subtlety and depth of this argument is in marked contrast to the rather more simplistic views of Dumont and Cohen.

Although the general conception of the book is commendable, there have been several unfortunate slips in execution. Faults include too many unexplained graphs and tables, the authors' cumbersome and somewhat repetitious style, which makes a rather dense style, which makes a rather dense style, which makes a rather dense style.

Readers might also have preferred to trade off some of the detail relating to the United States and the BEC, where there is already a surfeit of standard reference material, for more on policies operating in the third world. The lines adopted in the treatment of Bangladesh, India and Thailand, in spite of this the book has sufficient merit and topicality to appeal to a wide student audience and it will undoubtedly be useful if used with care and discrimination.

G. H. Peters

G. H. Peters is Director of the Institute of Agricultural Economics at the University of Oxford.

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Substantial complexity surrounds attempts to form a balanced view of world food prospects and the policies designed to secure the future. Obvious technical problems include understanding demographic change, analyzing producer and consumer responses, reviewing energy needs and availability, climatological forecasting, and gauging the pace of technological change. Compounding the difficulties is the sheer variety of national and international agricultural policies and the problem of securing any form of political agreement to necessary initiatives. These three books overlap in covering various aspects of the world scene, although the approach they are rather different.

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World food prospects

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by John R. Tarrant
Wiley, £15.50
ISBN 0 471 27656 1

Substantial complexity surrounds attempts to form a balanced view of world food prospects and the policies designed to secure the future. Obvious technical problems include understanding demographic change, analyzing producer and consumer responses, reviewing energy needs and availability, climatological forecasting, and gauging the pace of technological change. Compounding the difficulties is the sheer variety of national and international agricultural policies and the problem of securing any form of political agreement to necessary initiatives. These three books overlap in covering various aspects of the world scene, although the approach they are rather different.

David and Marcia Pimentel's work (in a new Arnold series on resources and environment) is focussed primarily on basic science rather than on policy analysis. Their objective in the measurement of both renewable and fossil energy use in various agricultural systems from the simplest hunting and gathering to the most sophisticated.

A sample of their persistent search for raw data is the estimate that the United States of America is a study in the history of land use. The danger in the persistently true, dominant tone of the Dumont and Cohen approach lies in the possibility of its provoking a counter reaction. When the motives for every action, apart from the relief of poverty, are depicted as being based on economic or strategic self-interest it is difficult to feel enthusiasm for any aid programme.

This is an unfortunate reaction to a book written by concerned authors, and this section does seem to be on firmer ground. In particular their analysis of the comparative failure of the Green Revolution is well done. They see it as the result of misplaced adherence to ultra-scientific agronomy, in spite of the fact that the social and institutional capabilities of developing nations. The inspiration of Schumacher is clearly in evidence in this argument and it is regrettable that what could have been a coherent thesis has been obscured by undue bias and by amateurishness in economic analysis.

John Tarrant, of the University of East Anglia, has produced a more substantial volume than the other two—the first of a new Wiley series which is also to be devoted to environmental and resource issues. His basic standpoint, in a rather more measured treatment, is interesting in that it reflects an important switch in emphasis from producer-orientated agricultural economics towards a greater concern for the welfare of the consumer. The dichotomy, obviously, is less marked the lower the level of development but immediately a more critical attitude is given a degree of urbanization, the presence of a class of rural landless labour. Some parts of the book are particularly useful. These include basically sensible sections covering recent food crises, production methods, and the impact of unemployment and availability, and, in a rather more scattered form, comments on the green revolution and the energy problem.

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Circles: a mathematical view
by D. Pedoe
Constable, £1.75
ISBN 0 486 63698 4

The first edition of this book appeared 23 years ago and was hailed by many mathematicians then as a veritable little gem. Despite the passage of time, it is notwithstanding the changes in mathematical fashion that have taken place during the past two decades, this new Dover edition still comes over as freshly as ever. It is aimed at those senior school-leavers and first-year undergraduates and, though short (there are only 87 pages), contains a wealth of material suitable for students at this stage in their mathematical education.

Each chapter, apart from the first, has a central theme or idea to convey, which the author skillfully gets across by using the language and properties of circles. The first chapter does not quite fit into this scheme of things; it is rather a sort of hors d'oeuvre, introductory to the three main chapters that follow. Among the topics treated here are the nine-point circle, some applications of inversion (including Feuerbach's theorem), Gergonne's connection for a circle required to touch three lines, and a treatment of the geometry of compass constructions.

The second chapter is concerned to explain and illustrate the idea of a representation. In the case discussed, a circle in the plane is represented by (or mapped on to) a point in space by taking the three parameters that occur in its standard equation as the three

coordinates of its representative point. Many examples are given to show how properties of circles in the plane are transformed into properties of points in space, and how our knowledge of the latter can thereby be used to supplement our knowledge of the former.

The next chapter takes up the important topic of non-Euclidean geometry, using a non-sensical analytical approach, without the historical argy-bargy that can so often be distracting and confusing to a beginner. The author develops the theory of the unit disc in the Argand plane, along with the Möbius transformations that carry it into itself, and comes rapidly to an account of the Poincaré model of hyperbolic geometry.

The final chapter is ostensibly to do with Steiner's proof of the isoperimetric property of the circle, namely that, of all closed plane curves with a given length, the circle is that which encloses the greatest area. But the real theme of this chapter is the problem of giving precise definitions to terms such as "length" and "area". These are, of course, essential ideas that must be assimilated by any student intending to understand the analytical background of integral calculus.

Apart from a few minor corrections and the addition of a collection of problems (with solutions), this edition differs little from the original Pergamon edition, and the price is still very reasonable. No school or undergraduate mathematics library should be without it.

J. A. Tyrell

J. A

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Colleges and Departments of Art

DORSET COUNTY COUNCIL
BOURNEMOUTH AND POOLE COLLEGE
OF ART AND DESIGNRoyal London House, Lansdowne, Bournemouth
Tel: 0202 20772

HEAD OF DEPARTMENT—FASHION DESIGN

Applications are invited from persons who have the appropriate qualifications and significant professional experience and show evidence of an ability to coordinate and develop the work of the Department.

Salary Scale: Burnham Head of Department Grade II (£10,044-£11,397).

LECTURER GRADE II—FASHION DESIGN

Applications are invited from suitably qualified persons for this new post.

Salary Scale: Burnham Lecturer Grade II (£8,012-£9,702).

Application forms (to be returned by 25th September 1980) and further details available from the Senior Administrative Officer.

LONDON

DORSET COUNTY COUNCIL

BOURNEMOUTH AND POOLE COLLEGE

OF ART AND DESIGN

HEAD OF DEPARTMENT—FASHION DESIGN

LECTURER GRADE II—FASHION DESIGN

APPLICATIONS ARE INVITED FROM SUITABLY QUALIFIED PERSONS FOR THIS NEW POST.

SALARY SCALE: BURNHAM LECTURER GRADE II (£8,012-£9,702).

APPLICATION FORMS (TO BE RETURNED BY 25TH SEPTEMBER 1980) AND FURTHER DETAILS AVAILABLE FROM THE SENIOR ADMINISTRATIVE OFFICER.

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KURING-GAI COLLEGE
OF
ADVANCED EDUCATION
SYDNEY, N.S.W., AUSTRALIA

Kuring-gai College of Advanced Education is a modern centre of higher education and community activity, offering a wide range of courses through the Schools of Financial and Administrative Studies, Library and Information Studies, Teacher Education, Environmental Studies, and Practical Legal Training. This final student population is 3,900.

Applications are invited for the following position.

PRINCIPAL

LECTURER

LIBRARY AND

INFORMATION SCIENCE

The College wishes to appoint a Principal Lecturer in Library and Information Science within the Department of Library and Information Studies. The Department provides the major part of all programmes offered by the School of Library and Information Studies, namely: Bachelor of Arts (Library Science), a three-year degree programme; Graduate Diploma in Library Science and Graduate Diploma in Information Science, both one-year post-graduate diplomas. The School of Library and Information Studies is presently considering the introduction of further programmes in Library and Information Studies at the graduate specialist diploma level and the Masters level. The Department of Library and Information Studies would have considerable input to these programmes and the Principal Lecturer would be responsible for the Department.

The Department is presently organised academically in three areas of information usage, information resources and information methods, each with a Subject Director. At present a Chairman is elected by teaching staff of the three areas to act as an administrative co-ordinator for the Department.

The successful applicant for the position of Principal Lecturer will be responsible for providing academic leadership for the integrated development of subjects offered within the Department of Library and Information Studies, and would be expected to contribute to the teaching of the subjects offered within the Department.

Applicants should possess a strong disciplinary background evidenced by higher degree qualifications, publications, an established research capacity, relevant professional experience, considerable experience in teaching at the tertiary level and the capacity to provide educational leadership.

The appointment will be made at one of the following salary levels.

Principal Lecturer I: \$Aust.29,012 p.a.

Principal Lecturer II: \$Aust.20,192 p.a.

Principal Lecturer III: \$Aust.13,369 p.a.

Applicants should send a curriculum vitae, including details of research, teaching, and administrative experience, to the Principal Lecturer, Kuring-gai College of Advanced Education, P.O. Box 232, Lindfield, N.S.W., 2070, Australia, by 28th November, 1980.

CANADA

UNIVERSITY OF ALBERTA

DEPARTMENT OF

EDUCATIONAL PSYCHOLOGY

EDUCATION OF THE

MULTIPLE/HANDICAPPED

POSITIONS OPEN

ASSOCIATE PROFESSOR

AND ASSISTANT PROFESSOR

IN THE

DEPARTMENT OF

EDUCATIONAL PSYCHOLOGY

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EDUCATION OF THE

Research Visits for
Social ScientistsResearch Visits to:
Federal Republic of Germany,
France or Sweden

Social science staff of UK higher educational and independent research institutions are invited to apply for SSRC awards for visits during 1980/81 aimed at developing contacts with social scientists in the above countries or doing preliminary research there. Awards are normally for a period of a few weeks and only exceptionally for up to three months. The financial support provides for travel, subsistence and minor research expenses. A detailed programme and timetable for the proposed visit is required and a working knowledge of the host country's language is normally expected.

Further details and application forms from: Dr. Michael Duggett, The Officer in Charge of Research Visits, SSRC, 1 Trench Avenue, London E9 6ED. Please state which country you hope to visit and quote reference RV/TH. Applications must be returned by 31 October 1980.

General Vacancies

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Cheapness
does not mean
poor quality

Keith Hampson

There is good and bad quality

cheap wine. University lecturers

are usually pretty well attuned to

the fact. So why do they so often

assume that any search for cheap-

ness in higher education necessarily

entails poor quality? It is, a

question raised in a stimulating

essay by Gareth Williams in a new

collection by Roderick and

Stephens, *Higher Education for*

All?

The futures lies with the develop-

ment of forms of higher education

that are cheap but of good quality.

This is the most vital task facing

higher education today.

But I am far from sanguine that

much is going to change in the near

future. The old bread and butter

issues—salaries, student numbers,

university/polytechnic rivalries, and

whether the DES has got its figures

right—hold sway. Staff/student

ratios are changing marginally, but

are we seriously asking what kind

of higher education we should be

providing, and for whom?

The Brown Paper, *Higher Educa-*

tion into the 1990s, was primarily

concerned with patching up a sys-

tem creaking under radical changes

in the birth rate, but at least it

was a shot—though a feeble one—

at seeking an overall strategy for

more than the year ahead. Model

E might have meant all things to

all men, but it did spark off a

constructive debate. Where is it

now? Why the devil do we bother

producing these documents if they

are only destined for the wastebin?

It is to be hoped the new Select

Committee on education will have

a more permanent impact.

Nobody even bothers these days

to make a decent case for expand-

ing higher education; it is taken

for granted that it must be expan-

ded. But if so, in what direction?

It clearly cannot grow in its present

form. If it did there would be

more, and different ways of allocat-

ing resources and new ways of rais-

ing them.

The important thing is to get the

concept of adult recurrent educa-

tion legitimized and brought

within the domain of public policy.

Sadly, the proposals of

recurrent education imbue it with

too much of a ring. A certain polit-

ical adroitness is necessary in

pitching the arguments. To the

present Government, it must be

couched in terms of individual self-

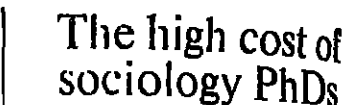
help and the upping of one's ante.

It is extraordinary that it still

displays such a totally negative

attitude to part-time education. It is

The high cost of sociology PhDs



Sir.—As possessors of doctorate degrees in sociology completed in the allotted time-span, and having converted the only into lectureships at universities but also into articles, books, we must be almost uniquely qualified, by criteria suggested by the USSR, to enter the columns have fostered a debate on completion rates in social science.

So let us be clear that we own success largely to luck in being studied at Durham University where we were able to graduate from school which did not ensure high standards of education, proper facilities for independent research—offices, use of the library, and the like. We were so on—and ample opportunity to clarify and develop our work through undergraduate teaching.

Most sociology graduates are fortunate. They are funded by penny-pence and combinations of grants (the USSR, for instance) and are predominantly

eventually despatched as con-
fodder for the egos of the re-

The current fashion seems to be either to blame the victim (in the case of most of your contributors), or to abstractly argue the postgraduate toss over policies of concentration or dispersal (as the SSRC have done for a decade). To us, this is a pretty unattractive choice. It is hardly the care before the horse. It is not to be complete unless they are given the wherewithal to do so.

Our postgraduate students are entitled to expect diligent and unfettered supervision. They also are entitled to expect diligent and unfettered material support. We do not, of course, want the yards of text-

and acres of laboratory space are unquestioningly (and rightly) given to postgraduate students of the natural sciences. There are facilities, appropriate to science postgraduate study, should be universally provided which, at the moment are provided at all.

Currently, most of our graduates have to struggle in crowded libraries and resourced departments. Yet a necessity must be for an

vidually occupied office, properly equipped with the tools of the trade—typewriter, stationery, telephone—and adequately backed with material and other assistance for scope for teaching.

The SSRC ought to be fighting for such basic facilities with the UGC and the universities. In return, the universities should be fighting to ensure that support is limited to those qualifications it is limited to those qualifications. Only on this basis can the SSRC undertake its long-term task.

supervisors' completion from the
dents. Then, and only then,
comparative, "completion rate"
publicly aired.
Yours faithfully,
JASON DITTON,
DEREK SAYER,
Department of Sociology,
University of Glasgow.

This Academic Board recognizes the great contribution which Inner London Education Authority and its predecessor, the London County Council, have as an integrated service made to the provision of education for the people of London. We are particularly aware of the crucial part which integrated services has played

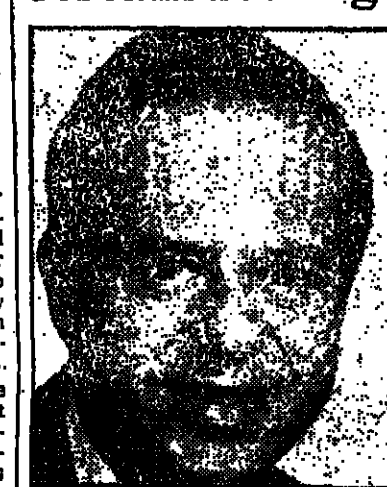
making effective much of the
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contribution to education in
London.
Yours sincerely,
DENIS BAYLES,
Information Officer,
University of London Inst
Education.

Letters for publication should
on Tuesday morning at the
They should be as short as
and should be written on
of the paper only. The edi-
serves the right to cut or
them if necessary.

THE LIVES OF



Why the young need that certain feeling



Steven Muller

polytechnics may appear popular institutions, but from the very different perspectives of a mass local electorate they inevitably appear exclusive and/or expensive. So Labour-controlled authorities may be tempted to disapprove of them on populist grounds; Conservative-controlled ones on financial grounds.

Yet most authorities resist these twin temptations. Their restraint is not a result of a rational calculation considering the extreme financial pressure that all local government has been put under by present Government policy on public expenditure. By and large there has been no planned invasion of polytechnic education by a separate search for savings to scrap or to scrap and re-forms. Although "capping the pool" that baleful mixed metaphor, and all that it represents in financial retrenchment has become a dominant element in the relationship between local government and central government, it seems to have exacerbated the Kirkcaldy divorce rather than their partnership has so far withstood the shock.

Of course this partnership is

capable of reform. No sensible councillor, chief education officer, director, or principal denies this. Everyone, except, sadly, the present education ministers, accepts that some kind of national body must be established to regulate the present relationship. Nevertheless, it remains important to see the Teessides and the Kirkleeses as the two isolated incidents that they truly are. Extreme cases always make bad law. Any temptation to treat these unfortunate incidents as political fodder into the maelstrom of quango-hood would be severely regretted.

This is the last of my monthly columns. The two years contemplated by the editor and me in 1977 were stretched into three by the interruption of publication. No surely the time has come for fresh and different American voices to be heard.

regime of statutory salary negotiations. If the closed shop is to be judged in terms of practical advantages, Natfhe's case appears especially weak. Nor should the rather prissy argument that non-members are being given a free ride because they enjoy all the benefits without contributing to the cost be given much weight. This should only be a factor if it can be shown that the abstinence of non-members actually undermines the efforts of their unionized colleagues. Again, in the conditions under which Natfhe operates, this is hardly the case.

All that has gone before is a criticism of Natfhe's means, not of its ends. The ends are those designed to achieve. The *THRS* has not changed its attitude to the APT.

nor its belief that the existence of the APT is inimical to good industrial relations because the association plays the part of the irresponsible maverick, and a negative element in the development of higher education as a whole because it plays the part of a sectional lobby.

without much restraint. Members of the APT, and there are certainly well-intentioned men and women among them, will disagree. Nor has *THE* changed its mind about Natfie which we believe is much the most appropriate trade union for higher education teachers outside the universities, with a sound and effective record in industrial relations, and sound and progressive views on higher education policy. It is precisely because we support Natfie's objectives that we deplore its present tactics on the closed shop.

In spite of the great changes in Communist Europe free and critical inquiry remains a subversive activity. Dr. Tomlin is determined to return to Czechoslovakia. That is a correct and brave ambition. We in turn should be determined to engage in the debate, and possibly the struggle, to reestablish intellectual freedom—freedom to think—in all the countries where it is denied.

Thinking about a concluding column, I decided to point up what seems to me to be the single most fundamental and significant challenge facing higher education in the United States—and one that our universities and colleges share with sister institutions around the world, most particularly in other political and democratic societies. This is to provide students with a perspective that will allow and encourage them to function self-confidently in a time of unprecedented complexity.

Education remains the university's central mission. Research that produces new knowledge as well as the concentration of learned talent on problems whose solution will benefit society can be accomplished outside universities. Universities perform these functions well because they have coupled them effectively with the educational mission. It was for education that universities were founded, and is by their performance as educational institutions that the public evaluates them.

The great and continuing universality debate of this century has been about how many students should have access to higher education and to what end. In the modern democracies it is now taken for granted that university education should no longer be reserved for select elite of the social privileged, predestined to leadership of the professions and vocations. Great value is now placed on giving every human talent maximum opportunity for self-development. And it is well recognized

What is at issue in the contemporary university debate, therefore, is neither the question of more widespread access to universities nor the need for more specialized courses of training. Rather, the issues are such as to proper balance between university training and available employment opportunities, standards appropriate to a more open, less elitist system of higher education.

Real and difficult as these issues are, they seem to me to be dwarfed by the more fundamental questions about the capacity of university education to produce citizens who can function as self-confident participants in today's technological societies.

persons and of human perception the explosion of potentially acceptable knowledge, and the disposal of human time, released by the use of machinery to replace human labor constitute an unprecedented assault on individual human self-conception. Technology, mobility, new knowledge and leisure resulting from automation all bring benefits, but they also create confusion. Confusion looks back in vain for any period when the individual was confronted by changes so rapid and so pervasive, by choices so numerous

unpredictable, by knowledge complex and so various. More so than ever before from tolls inherited station, the individual also more dependent than ever on an interactive societal process whose sheer size and complexity defies personal autonomy—and so confidence,

Political democracy absolute rests on the concept of individual responsibility. It is a social system designed to be responsive to individual initiative. Such initiative demands a fundamental self-confidence. Absent the self-confidence of individual participant, modern democracy cannot endure and will be replaced by authoritarian dictatorship.

It is worth noting that individual self-confidence was built into elitist university of the past. Prerequisite breeds self-confidence

those who become university students in older days had every reason for confidence that they would be well qualified to manage their lives. My point in fact is that their self-confidence could be taken for granted so much that its absence among their more numerous temporary successors has been little remarked upon.

What is needed today is a sense of perspective to guide individual consciousness towards a functional self-confidence, to serve as a gyroscope for values and direction. So a sense of perspective is what

Right along with their native societies, the great universities of the West evolved from religious orthodoxy first, to the humanism of the Enlightenment, and thence to the scientific and industrial revolution. But having turned away from both religion and social caste, with perspective on life do they still offer their students?

the worst that may be said at the scientific method is that it seems to serve authoritarian societies as well as democratic ones. The successful creation of modern universities in authoritarian states may be less of a tribute to the university as an institution than evidence that the methodology of science alone is not uniquely geared to the values of Western democracy. At issue in the United States and other political democracies is the role of the humanities in higher education, but the humanism of

contemporary university. Cross scientific study of the human fosters humanism as little as scientific study per se detracts from Modern humanity must solve problems and make informed choices. It is the task of the university to equip students for these tasks. In the democracies—if they are survive—a measure of individual self-confidence must be part of education.

But this, in turn demands a sense of perspective and orientation goes beyond mere technical

If I am right, then the evolution of a new humanism is the most urgent mission facing the contemporary American—and Western—democratic university. More than a century ago the university had to free modern society of dogma and become midwife to the technological revolution. Today our need our knowledge so dwarf our understanding that we need a new perspective on the human condition. The experiment in religious

fundamentalism and "irrationalism" that mark "the American student's experience at the first year are no answer, but they do serve as evidence of the need. In the fundamental sense our students are asking who they are and where they are going.

There is no more central but more difficult question than "what should I do?" If the answer is to be the democratic "choose wisely and well" rather than the authoritarian "as you are told," then the future role of the Western university is crucial indeed.

We must discover new ways to help our students to prepare to change the world.

We owe this service to our students, to our societies, and to ourselves. The Western universities received great freedom because they served their societies when they were most free. Free societies need free universities. And free societies need free citizens. And free citizens are trained participants who are trained and self-confident.

This is Steven Muller's column. He is being succeeded by George Rainford, president of the American Society for the Advancement of Education.

will appear on October 10.

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